

fragile, Kochia prostrata, Artemisia terrae-albae on higher sites.

PI 598708. *Agropyron fragile* (Roth) P. Candargy

Wild. JA-92; VIR U-0134780; W6 13367. Collected in Kazakhstan. Latitude 49 deg. 14' N. Longitude 60 deg. 40' E. Elevation 230 m. Sandy soil, 172km north northeast of Chelkar. Annual precipitation 200mm. Expansive stand of shrubs and grasses dominated by *Stipa* spp., *Artemisia* *terrae-albae*, *Agropyron fragile*, and *Kochia prostrata*.

PI 598709. *Agropyron fragile* (Roth) P. Candargy

Wild. JA-93; VIR U-0134813; W6 13368. Collected in Kazakhstan. Latitude 49 deg. 25' N. Longitude 60 deg. 19' E. Elevation 230 m. Silty-sand soil, area surrounding dry lake bed, 188km north northeast of Chelkar. Annual precipitation 200mm. Vegetation dominated by *Artemisia* *terrae-albae* and other shrubs, *Agropyron* spp., *Poa* spp., and *Stipa* spp.

PI 598710. *Agropyron fragile* (Roth) P. Candargy

Wild. JA-94; VIR U-0134769; W6 13369. Collected in Kazakhstan. Latitude 49 deg. 25' N. Longitude 60 deg. 19' E. Elevation 230 m. Silty-sand soil, area surrounding dry lake bed, 188km north northeast of Chelkar. Annual precipitation 200mm. Red-stemmed type. Vegetation dominated by *Artemisia* *terrae-albae* and other shrubs, *Agropyron* spp., *Poa* spp., and *Stipa* spp.

PI 598711. *Agropyron fragile* (Roth) P. Candargy

Wild. JA-95; VIR U-0134811; W6 13370. Collected in Kazakhstan. Latitude 49 deg. 25' N. Longitude 60 deg. 19' E. Elevation 230 m. Silty-sand soil, area surrounding dry lake bed, 188km north northeast of Chelkar. Annual precipitation 200mm. Two-plant collection. Red spikes and red nodes. Vegetation dominated by *Artemisia* *terrae-albae* and other shrubs, *Agropyron* spp., *Poa* spp., and *Stipa* spp.

PI 598712. *Agropyron fragile* (Roth) P. Candargy

Wild. JA-96; VIR U-0134823; W6 13371. Collected in Kazakhstan. Latitude 49 deg. 53' N. Longitude 60 deg. 8' E. Elevation 230 m. Silty loam soil, upland site, 230km north of Chelkar and 5km south of Karabutak. Annual precipitation 250mm. Vegetation - *Agropyron fragile*, *A. cristatum*, *A. desertorum*, *Medicago* spp., *Artemisia* spp., and some annual weeds.

PI 598713. *Agropyron fragile* (Roth) P. Candargy

Wild. JA-97; VIR U-0134846; W6 13372. Collected in Kazakhstan. Latitude 50 deg. 9' N. Longitude 58 deg. 51' E. Elevation 310 m. Silty-clay soil, 115km east of Aktyubinsk. Annual precipitation 250mm. Vegetation - *Artemisia* spp., *Psathyrostachys juncea*, *Medicago sativa*, *Agropyron cristatum*, *A. desertorum*, *A. cristatum*, miscellaneous shrubs and annual weeds.

PI 598714. *Agropyron fragile* (Roth) P. Candargy

Wild. JA-98; VIR U-0134858; W6 13373. Collected in Kazakhstan. Latitude 47 deg. 50' N. Longitude 59 deg. 22' E. Elevation 215 m. Heavily grazed range, 20km west southwest of Chelkar. Annual precipitation 150mm. Vegetation dominated by *Artemisia* *terrae-albae*, some *Salsola*, and 6 or 7 plants of *Agropyron fragile* in protected area.

PI 598715. *Agropyron fragile* (Roth) P. Candargy